

REMARKS / DISCUSSION OF ISSUES

The present amendment is submitted in response to the Office Action mailed June 15, 2009, Claims 1-25 remain in this application. Claims 1, 4, 15, 16, 18 and 21 have been amended. In view of the remarks to follow, reconsideration and allowance of this application are respectfully requested.

Drawing Objection

In the Office Action, the drawings were objected to for failing to comply with 37 CFR 1.21(d) because FIGS. 1 and 2 should be designated by a legend such as --Prior Art --. Applicants respectfully request withdrawal of the drawings objection and approval of the enclosed proposed drawing change including a proper labeling of FIGS. 1 and 2.

Claim Objections

Claim 18 is objected to for certain informalities. Specifically, Claim 18 is objected to with regard to the phrase "a comprises". Claim 18 has been amended in a manner which is believed to overcome the rejection.

35 U.S.C. §112, first paragraph

Claim 2 stands rejected under 35 U.S.C. §112, first paragraph because the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with the claim. The rejection of claim 2 is understood to be based on the premise that the specification, while being enabling for a capacitance sensing arrangement comprising a plurality of electrode segments, does not reasonably provide enablement for any and all, future and present, capacitance sensing arrangements. Applicants respectfully traverse the rejection. MPEP 2164.08 states that a determination of the propriety of a rejection based upon the scope of a claim relative to the scope of the enablement involves two stages of inquiry. The first is to determine how broad the claim is with respect to the disclosure. The entire claim must be considered. The second inquiry is to determine if one skilled in the art is enabled to make and use the entire scope of the claimed invention without undue experimentation. Addressing the first stage of inquiry, claim 2 recites - A lens **as claimed in claim 1**, wherein the sensing

arrangement (80) comprises a **capacitance sensing arrangement**. Claim 1 recites - a sensing arrangement (80) for determining, from at least the plurality of electrode segments (40,70), lens surface characteristics at a plurality of angular orientations. Accordingly, the capacitance sensing arrangement of claim 2 does not provide enablement for any and all, future and present capacitance sensing arrangements. Rather, it provides enablement for any and all, future and present capacitance sensing arrangements for determining, from at least the plurality of electrode segments (40,70), lens surface characteristics at a plurality of angular orientations. Further, the disclosure teaches at pages 3-4, 6-7 and 9, and Figs. 2 and 6, a number of capacitance sensing arrangements. Addressing the second stage of the inquiry, Applicants respectfully submit that the various examples and embodiments described in the specification at pages 3-4, 6-7 and 9, and Figs. 2 and 6, would allow one skilled in the art to make and use a capacitance sensing arrangement without undue experimentation. Based on the above remarks, Applicant respectfully submits that the specification provides enablement for the scope of claim 2 and requests reconsideration and removal of the rejections under 35 U.S.C. § 112, second paragraph.

35 U.S.C. §112, second paragraph

Claims 1-25 stand rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claims 1 and 25 is understood to be based on the premise that the claims are considered to be indefinite because of double inclusion. Both claims have an electrode arrangement and a sensing arrangement, which utilize the same elements. Applicants have amended claims 1 and 25 to recite that the sensing arrangement is coupled to the electrode arrangement and, therefore do not utilize the same elements in that the sensing arrangement receives sensing information from the electrode segments and performs a sensing operation with the provided information. See Fig. 8 of the specification, for example, where it is shown that the electrode arrangement 70 comprises sensing electrode elements is coupled to the sensing arrangement 80, to perform a capacitance measurement with the information provided by the electrode arrangement 70 sensing electrode elements.

The rejection of claim 4 is understood to be based on the premise that it is unclear “which comprises the plurality of electrode segment” modifies. Applicants have deleted this phrase from claim 4. The rejection of claims 4 and 15 is also understood to be based on the premise that it is unclear what the “patterned top electrode” is the “top” of. There is no structural relationship to provide a location such as “top” or “bottom”. Applicants have amended claims 4 and 15 to recite that the patterned top electrode (4) is located on a top surface of said chamber housing said first and second fluids (10,12).

The rejection of claim 15 is understood to be based on the premise that it is unclear what “comprises” an alternating current source“. Applicants have amended claim 15 in accordance with the Examiner’s suggestion, correctly assuming that it is the “capacitance sensing arrangement” which comprises the current source. Accordingly, Applicants have inserted the term --which—to help clarify the phrase.

I. Claim Rejections under 35 USC 102

A. Rejection of Claims 1-3, 14 and 17

In the Office Action, Claims 1, 2, 21, 22, 24 and 25 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Application No. 2001/0024486 (“Herbert”). Applicants respectfully traverse the rejections.

Claims 1, 2, 21, 22, 24 and 25 are allowable

Independent Claims 1 and 25 have been amended herein to better define Applicant’s invention over Herbert. Claims 1 and 25 now recite limitations and/or features which are not disclosed by Herbert. Accordingly, the cited portions of Herbert do not anticipate claims 1 and 25, because the cited portions of Herbert fail to disclose every element of claims 1 and 25. For example, the cited portions of Herbert fail to disclose or suggest, “*an electrode arrangement for electrically controlling the shape of the lens surface and for sensing the shape of the lens surface, the electrode arrangement comprising a plurality of driving and sensing electrode segments at different angular orientations about an optical axis of the lens;*

and a sensing arrangement, coupled to the sensing electrode segments, to perform a sensing operation to determine from at least the plurality of driving and sensing electrode segments, lens surface characteristics at a plurality of angular orientations”, as recited in claim 1 (Emphasis Added). Instead, the cited portions of Herbert disclose a plurality of electrode segments (123, 124 in Fig. 3a), the segments being electrically combined in two subgroups (123, 124) in order to apply an electric potential to the wall segments of the filter element to achieve a step-wise filling of the inner volume (31) by the fluid (32). See Herbert, Abstract. Wherein the neighbouring segments are mutually electrically isolated (123,124), and a first electric potential being switchable between the segments by the voltage supply means (136) to alter the length of the column of the X-ray absorbing fluid in the X-ray propagation direction. Thus, it is shown that the electrode segments (123, 124) each function to apply an electric potential to the wall segments of the filter element. Conversely, these segments (123, 124) do not perform a sensing operation, in contrast to the invention in which *an electrode arrangement for electrically controlling the shape of the lens surface and for sensing the shape of the lens surface, the electrode arrangement comprises a plurality of driving and sensing electrode segments*, as recited in claim 1. It is noted that the sensing operation is performed in Herbert by an electrical source 50 and the electrical circuit of the detectors 100 and 102 and not by the electrode segments (123, 124). See Herbert, par. 25, recited herein in part as follows:

FIG. 4 presents an equivalent electrical circuit for a detection of the fluid level within a filter element, wherein the first electrode in segmented and two electrical subgroups based on resulting segments are formed. From FIG. 4a it follows that each subgroup of segments can be described by a variable electric capacitance 140, which is formed between each subgroup of segments and the fluid, the value of the capacitance being a function of the degree of filling of that subgroup by the fluid. The voltage supply means 136, initiating the filling of a subgroup of the filter elements, supply the voltage to these subgroups via switch 138. The measuring means comprise an AC source 50 and the electrical circuit of the detectors 100 and 102.

[Emphasis Added]

Further, the cited portions of Herbert do not disclose an electrode arrangement comprising a plurality of driving and sensing electrode segments **at different angular orientations about an optical axis of the lens**, as in claims 1 and 25. Instead, Herbert discloses an X-ray apparatus with an X-ray source (1) for producing a beam of X-ray radiation (2), an X-ray detector (4) to detect the X-ray radiation and a filter (12) comprising filter elements (13) containing an X-ray absorbing medium (32). The filter elements (13) being positioned between the X-ray source and the X-ray detector to absorb the X-ray radiation. The X-ray absorption properties of filter elements (13) being individually controllable by changing a length of a column of the X-ray absorbing medium (32) in a propagation direction of the X-ray beam (2). Each filter element comprising a first electrode (33) for supplying a first electric potential to its wall (38) and a second electrode (39) for supplying a second electric potential to the electrically conducting fluid (132). FIG. 3 of Herbert is a schematic functional representation of a filter element of FIG. 2, where the first electrode is segmented in the length direction z of the filter element 213 and forms two electric subgroups 123 and 124, respectively. It is respectfully submitted that segmenting the first electrode in the length direction z is different from having sensing electrode segments **at different angular orientations about an optical axis of the lens**, as recited in claims 1 and 25. Hence claims 1 and 25 are allowable.

Claims 1, 2, 21, 22 and 24 depend from independent Claim 1 and therefore contains the limitations of Claim 1 and is believed to be in condition for allowance for at least the same reasons given for Claim 1 above. Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b) and allowance of Claims 1, 2, 21, 22 and 24 is respectfully requested.

B. Rejection of Claims 1-25

In the Office Action, Claims 1, 2, 21, 22, 24 and 25 stand rejected under 35 U.S.C. §102(b) as being anticipated by published article "Patterned ITO contacts and Cross-Capacitance Sensing (CCS) for measuring the shape of an electro-wetting lens", Immink, 8 September, 2003.

Claims -25 are allowable

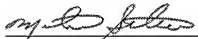
Applicants are under the good faith belief that the publication of the article "Patterned ITO contacts and Cross-Capacitance Sensing (CCS) for measuring the shape of an electro-wetting lens", Immink, 8 September, 2003, was an internal Philips publication and therefore not subject to the §102(b) publication bar. Hence, claims 1-25 are believed to contain patentable subject matter.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-25 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Mike Belk, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-945-6000.

Respectfully submitted,



Michael A. Scaturro
Reg. No. 51,356
Attorney for Applicants

Mailing Address:
Intellectual Property Counsel
Philips Electronics North America Corp.
P.O. Box 3001
345 Scarborough Road
Briarcliff Manor, Previously Presented York 10510-8001